

Amendments to the Drawings

The Examiner has objected to the drawings because they do not include reference numerals for the following elements: rear wheels 22 (Page 3, line 16); control levers 38 (Page 3, line 21); handle 66 (Page 5, line 1); and flow diagram 600 (Page 10, line 12).

Figure 1 has been amended to include reference numerals for the rear wheels 22 and the control levers 38. However, the reference numeral for the control levers 38 has been changed to 35. The specification has been amended accordingly, as described below.

Figure 2 has been amended to include a reference numeral for the handle 66.

Figure 8 has been amended to include a reference numeral for the flow diagram 600.

Attachment: Replacement Sheets (3)

REMARKS

Claims 1-58 are currently pending. By this amendment, claims 1-16 and 32-58 are cancelled without prejudice. Claim 21 has been amended. Claims 17-20 and 22-31 are unchanged.

Specification

Applicants have amended the paragraph beginning on page 3, line 16 of the specification to correct the reference numeral designated to the control levers. More specifically, “control levers 38” are changed to “control levers 35.”

Applicants have amended claim 21 to provide proper antecedent basis for the claimed elements, as suggested by the Examiner.

Drawings

Applicants have amended Figures 1, 2, and 8 to provide reference numerals for elements described in the specification. No new matter has been added.

Claim Rejections 35 USC § 102

On page 4 of the Office action, the Examiner rejected claims 1, 8, 10, 32, 38, 42, and 45-48 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,955,942 (“Slifkin”). Applicants have canceled claims 1, 8, 10, 32, 38, 42, and 45-48, therefore, the rejection of those claims is moot.

Claim Rejections 35 USC § 103

The Examiner has rejected multiple claims under 35 U.S.C. §103(a). As noted above, claims 1-16 and 32-58 are cancelled without prejudice. Accordingly, the rejections of those claims are moot.

On page 13 of the Office action, the Examiner rejected claims 17, 22, and 26-28 under 35 U.S.C. §103(a) as being unpatentable over Slifkin in view of Lonn. The Examiner

suggests that it would have been obvious to one having ordinary skill in the art to include the monitoring system of Slifkin with the diagnostic and parameter condition logger of Lonn in order to be able to receive as much information as possible about a vehicle to provide in corrections that may be needed.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *MPEP* 2142. The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). *Id.*

The Examiner has not established a *prima facie* case of obviousness in the rejection of claims 17, 22, and 26-28. First, Applicants dispute the suggestion and motivation to combine references Slifkin and Lonn provided by the Examiner. Second, the combination of Slifkin and Lonn does not provide a reasonable expectation of success. Finally, the combination of Slifkin and Lonn do not teach or suggest all claim limitations.

Applicants insist that there is no suggestion or motivation to combine Slifkin and Lonn. In fact, to the contrary, it is unreasonable to combine Slifkin and Lonn. Slifkin discloses a monitoring system for use in vehicles, which is implemented because "various events effect the operation of vehicles, such as trucks and railroad cars, and the safety of their cargos." *Col. 1, lines 11-12*. For example, the monitoring system of Slifkin is used to monitor and record events that affect the vehicle, such as a substantial shock caused by two

railroad cars colliding. Lonn, on the other hand, discloses a diagnostics and parameter condition logger for a turf maintenance vehicle, which is implemented to “minimize the downtime of the turf maintenance vehicle, optimize the diagnostic functions and maintenance of the vehicle, and provide a user-friendly diagnostic tool.” *Col. 3, lines 7-10*. For example, the diagnostics and parameter condition logger is used to monitor and record parameters that are internal to the operation of the turf vehicle, such as coolant temperature and blade speed.

It is unreasonable to combine the system of Slifkin, which is used to track events encountered by a railroad car, and the system of Lonn, which is used to track the internal operations of a turf vehicle (such as a lawnmower). In fact, Lonn teaches away from Slifkin. Lonn discloses that “[i]n the automotive art, various electronic controllers have been utilized for engine operation. The present inventors [of Lonn] believe that such automotive controllers include error codes which are generated by the controller in the event that one or more parameters are not within expected ranges.” *Col. 2, lines 20-24*. However, this methodology causes problems which “make the automotive solution inapplicable to a turf maintenance vehicle setting.” *Col. 2, lines 39-41*. Slifkin describes a system that uses a microcomputer MC1 to set an initial or first threshold, which any signal must exceed to be deemed of sufficient amplitude to enter the monitor mode. *Col. 3, lines 30-37*. Therefore, the microcomputer MC1 of Slifkin operates in exactly the manner which Lonn describes as inapplicable to a turf maintenance vehicle setting.

Additionally, Applicants respectfully submit that the combination of Slifkin and Lonn does not provide a reasonable expectation of success. The system described in Slifkin is configured to track events affecting the operations trucks and railroad cars. Such a system would not be easily adaptable to a significantly smaller turf maintenance vehicle. Furthermore, the events that affect the operations of a truck or a railroad car are clearly different than the events that affect the operations of a turf maintenance vehicle.

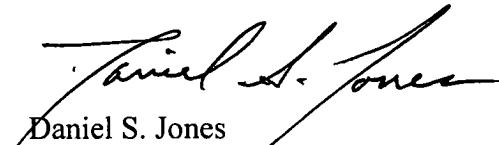
Finally, even assuming that the proposed combination of Slifkin and Lonn could be made, such combination would not meet all limitations of claim 17. Claim 17 recites, among other things, “a signal conditioning circuit connecting the accelerometer to the microprocessor for transferring the impact force data, the signal conditioning circuit filtering the impact force

data and providing filtered impact data that is scaled to parameters of the lawnmower, the filtered impact data being saved in the memory.” Lonn does not show, describe, or suggest a signal conditioning circuit. Although Slifkin discloses signal conditioning circuits SC1-SC3, Slifkin does not show, describe, or suggest scaling filtered data. The signal condition circuits SC1-SC3 of Slifkin receive signals from the filters FI1-FI3, and “condition the signals by adding or removing signal elements.” *Col. 2, lines 57-59*. Slifkin makes no mention of scaling filtered data, much less scaling such data to parameters of a lawnmower.

In light of the arguments made herein, Applicant respectfully requests withdrawal of the rejection to independent claim 17. Claims 18-31 depend from claim 17, and are therefore patentable for at least the same reasons as claim 17 is patentable, and because they recite other patentable features.

The Applicant respectfully requests entry of the Amendment and the allowance of Claims 17-31.

Respectfully submitted,


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